

LISTING OF CLAIMS:

10/511558

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This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) A process for producing copy protection for an electronic circuit, comprising the steps of:

providing a substrate (1) ~~which has~~ having semiconductor structures (2) on at least a first side (1a) of the substrate (1);

providing a material for coating the substrate (1); and  
coating the substrate (1) with a copy-protect layer (4),  
~~which is applied by evaporation coating.~~

2. (Currently amended) The process as claimed in claim 1, wherein the semiconductor structures (2), at least in regions, are covered by ~~means of~~ the copy-protect layer (4), the copy-protect layer (4) being matched to the substrate (1) ~~in such a way so that an etching process which that~~ dissolves the copy-protect layer (4) likewise attacks the substrate (1) ~~in such a manner so that the semiconductor structures (2)~~ are at least partially destroyed.

3. (Currently amended) The process as claimed in claim 1 or 2, wherein the substrate (1) comprises a semiconductor layer of silicon[[],] and the copy-protect layer (4) ~~contains~~ comprises silicon.

4. (Currently amended) The process as claimed in ~~one of the preceding claims~~ claim 1, wherein ~~a continuous layer is applied as~~ the copy-protect layer (4) is a continuous layer.

5. (Currently amended) The process as claimed in ~~one of~~ the preceding claims claim 1, wherein the copy-protect layer (4) comprises glass, in particular silicate glass.

6. (Currently amended) The process as claimed in ~~one of~~ the preceding claims claim 1, wherein the copy-protect layer (4) comprises a borosilicate glass with aluminum oxide and alkali metal oxide fractions.

7. (Currently amended) The process as claimed in ~~one of~~ the preceding claims claim 1, wherein the copy-protect layer (4) comprises ~~an at least~~ a binary system.

8. (Currently amended) The process as claimed in ~~one of~~ the preceding claims claim 1, wherein the copy-protect layer (4) comprises a shield against electromagnetic waves.

9. (Currently amended) The process as claimed in ~~one of~~ the preceding claims claim 1, wherein coating the substrate with the copy-protect layer (4) ~~is applied by~~ comprises evaporation coating induced by thermal evaporation or by electron beam evaporation.

10. (Currently amended) The process as claimed in ~~one of~~ the preceding claims claim 1, wherein the copy-protect layer (4) is applied to the substrate in a thickness of from 0.01 to 1000  $\mu\text{m}$ .

11. (Currently amended) The process as claimed in ~~one of~~ the preceding claims claim 1, wherein the coating of the substrate ~~(1)~~ with the copy-protect layer ~~(4)~~ is carried out comprises coating at a bias temperature of below 300°C.

12. (Currently amended) The process as claimed in ~~one of~~ the preceding claims claim 1, wherein the coating of the substrate ~~(1)~~ with the copy-protect layer ~~(4)~~ is carried out comprises coating at a pressure of from 10<sup>-3</sup> mbar to 10<sup>-7</sup> mbar.

13. (Currently amended) The process as claimed in ~~one of~~ the preceding claims, wherein claim 1, further comprising applying a glass layer ~~(14)~~ is applied to a second side ~~(1b)~~ of the substrate ~~(1)~~, which wherein the second side is on the opposite side from the first side ~~(1a)~~.

14. (Currently amended) The process as claimed in ~~one of~~ the preceding claims, wherein claim 1, further comprising applying a plastics layer ~~(5)~~ is applied to a second side ~~(1b)~~ of the substrate ~~(1)~~, which wherein the second side is on the opposite side from the first side ~~(1a)~~.

15. (Currently amended) The process as claimed in ~~one of the preceding claims, wherein~~ claim 1, further comprising:

thinning the substrate (1) is thinned;

producing etching pits (6) with connection structure regions (3) as etching stop are produced on the first side (1a) of the substrate (1);

applying a plastics layer (10) is applied to a second side (1b) of the substrate (1), which wherein the second side is on the opposite side from the first side (1a), by means of plastics lithography, with, the plastics layer being applied so that the connection structure regions (3) remaining remain open;

producing contacts (7) are produced on the second side (1b) by coating with a conductive layer;

applying a ball grid array (8) is applied; and

dicing the substrate (1) is diced into individual chips.

16. (Currently amended) The process as claimed in claim 15, wherein further comprising removing the plastics layer (10) on from the second side (1b) is removed again.

17. (Currently amended) The process as claimed in claim 1, further comprising:

~~one of the preceding claims, wherein evaporation coating a second side (1b) of the substrate (1), which is on the opposite side from the first side (1a), is evaporation-coated with a glass layer (11) that is from 0.01 μm to 50 μm thick;~~ and

uncovering connection structure regions (7) located beneath the glass layer (11) are uncovered by means of grinding or etching.

18. (Currently amended) The process as claimed in ~~one of~~ the preceding claims, wherein claim 15, further comprising filling the etching pits (6) are filled with conductive material.

19. (Currently amended) The process as claimed in ~~one of~~ the preceding claims, wherein the substrate (1) comprises claim 1, further comprising:

coating the connection structures which are coated with a structured covering layer (15) before the coating with the copy-protect layer (4) is carried out;

thinning the copy-protect layer (4) is thinned, at least until the structured covering layer (15) has been uncovered; and

removing the structured covering layer (15) is removed in order to uncover the connection structure[[s]] regions (3).

20. (Currently amended) The process as claimed in ~~one of~~ the preceding claims claim 19, wherein at least sections of a the structured covering layer (15) and at least sections of the copy-protect layer (4) are removed by means of a lift-off technique.

21. (Currently amended) The process as claimed in ~~one of~~ the preceding claims, wherein claim 15, further comprising applying a ball grid array (18) is applied to the first side (1a) of the substrate (1) on the connection structures (3) regions.

22. (Currently amended) The process as claimed in ~~one of~~ the preceding claims claim 1, wherein the semiconductor structures (2) comprise electronic decryption means devices.

23. (Cancelled)

24. (Currently amended) The electronic component with copy protection, comprising:

~~an electronic circuit on a substrate (1) with semiconductor structures (2) on having a first side (1a) of the substrate (1);~~

semiconductor structures on the first side; and

a copy-protect layer (4) fixedly joined to at least a region of the semiconductor structures.

25. (Currently amended) The electronic component as claimed in claim 23 or 24, wherein the copy-protect layer (4) ~~contains comprises~~ a first material, the semiconductor structures (2) being covered by the copy-protect layer (4) at least in regions, the copy-protect layer (4) being fixedly joined to the substrate (1), and the first material being determined in such a manner that being selected so that an etching process ~~which that~~ dissolves the copy-protect layer ~~likewise attacks the substrate in such a manner that the also destroys a portion of the electronic circuit is destroyed.~~

26. (Currently amended) The electronic component as claimed in ~~one of claims 23 to~~ claim 25, wherein the substrate (1) comprises a semiconductor layer of silicon and the copy-protect layer (4) ~~contains comprises~~ silicon.

27. (Currently amended) The electronic component as claimed in ~~one of claims 23 to 26~~ claim 24, wherein the copy-protect layer (4) ~~comprises is~~ a continuous layer.

28. (Currently amended) The electronic component as claimed in ~~one of claims 23 to 27~~ claim 24, wherein the copy-protect layer (4) comprises ~~glass, in particular~~ silicate glass.

29. (Currently amended) The electronic component as claimed in ~~one of claims 23 to 28~~ claim 24, wherein the copy-protect layer (4) comprises a borosilicate glass with aluminum oxide and alkali metal oxide fractions.

30. (Currently amended) The electronic component as claimed in ~~one of claims 23 to 29~~ claim 24, wherein the copy-protect layer (4) is ~~applied by~~ an evaporation coating.

31. (Currently amended) The electronic component as claimed in ~~one of claims 23 to 30~~ claim 24, wherein the copy-protect layer (4) comprises a binary system.

32. (Currently amended) The electronic component as claimed in ~~one of claims 23 to 31~~ claim 24, wherein the copy-protect layer (4) ~~comprises shielding against~~ shields electromagnetic waves.

33. (Currently amended) The electronic component as claimed in one of claims ~~23 to 32~~ claim 24, wherein the copy-protect layer (4) is ~~applied by evaporation coating induced by a thermal evaporation coating or by~~ an electron-beam evaporation coating.

34. (Currently amended) The electronic component as claimed in ~~one of claims 23 to 33~~ claim 24, wherein the copy-protect layer (4) is from 0.01  $\mu\text{m}$  to 1000  $\mu\text{m}$  thick.

35. (Currently amended) The electronic component as claimed in ~~one of claims 23 to 34, wherein the substrate (1) has claim 24, further comprising~~ connection structures ~~(3)~~, and elevated connection structures ~~(8)~~ are arranged on a second side ~~(1b)~~ of the substrate ~~(1)~~, ~~which is the second side being~~ on the opposite side from the first side ~~(1a)~~, ~~wherein the elevated connection contacts (8) being structures are~~ electrically connected to the connection structures ~~(3)~~.

36. (Currently amended) The electronic component as claimed in claim 35, wherein the second side ~~(1b) of the substrate (1)~~ is coated with plastic ~~(10)~~ between the elevated connection contacts (8), with structures so that the elevated connection contacts (8) remaining structures remain uncovered in such a manner that they can be contact-connected.

37. (Currently amended) The electronic component as claimed in claim 35 ~~or 36~~, wherein the second side ~~(1b) of the substrate (1)~~ is coated with glass ~~(11)~~ between the elevated connection contacts (8), with structures so that the elevated connection contacts (8) remaining structures remain uncovered such that they can be contact-connected.

38. (Currently amended) The electronic component as claimed in ~~one of claims 23 to 37, wherein the substrate (1) has claim 24, further comprising~~ connection structures and elevated connection contacts ~~(18)~~ are arranged on the first side ~~(1a)~~ of the substrate ~~(1)~~, the elevated connection contacts (18) being electrically connected to the connection structures ~~(3)~~.

39. (Currently amended) The electronic component as claimed in ~~one of claims 23 to claim~~ 38, wherein the copy-protect layer ~~(4)~~ on the first side ~~(1a)~~ of the substrate ~~(1)~~ extends between the elevated connection contacts and the connection structures ~~(3, 18)~~ so that the elevated connection contacts and the connection structures, the connection contacts ~~(3, 18)~~ remaining remain uncovered such that they can be contact connected.

40. (Currently amended) The electronic component as claimed in ~~one of claims 23 to 39~~, wherein the electronic circuit comprises claim 24, further comprising a decryption means device.

41. (Currently amended) The electronic component as claimed in ~~one of claims 23 to 40~~ claim 24, wherein the copy-protect layer ~~(4)~~ has a first portion ~~(4a)~~ and a second portion ~~(4b)~~ which that have different etching properties, in particular comprise materials with different etching rates.

42. (Currently amended) A decryption device for decrypting encrypted signals, ~~in particular used in pay broadcasting,~~ comprising:

an electronic circuit on a substrate having a first side;  
semiconductor structures on the first side;  
a copy-protect layer fixedly joined to at least a region of  
the semiconductor structures; and  
a decryption device the component as claimed in one of  
claims 24 to 41.

43 through 45. (Cancelled)